

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings of claims in the application:

**Listing of Claims:**

1-33. (Canceled)

34. (Currently Amended) A method of delivering a diagnostic agent to a target cell in an organism, the method comprising administering to an organism a targeted complex of the formula:

{[I(delivery vehicle-CM)I]-TMI-[CM-targeting ligand]};

wherein the delivery vehicle is an adenovirus, CM is a chelating peptide, delivery vehicle CM is a delivery vehicle that displays on its surface a polypeptide that comprises a chelating moiety (CM), TMI is a transition metal ion, and CM-targeting ligand is a chelating peptide moiety (CM) covalently linked to a targeting ligand that binds to the target cell, and, wherein the delivery vehicle comprises a diagnostic agent.

35-39. (Canceled)

40. (New) The method of claim 34, wherein the adenovirus lacks a native adenovirus ligand that binds to a native cellular receptor for the adenovirus.

41. (New) The method of claim 34, wherein the adenovirus is replication competent.

42. (New) The method of claim 41, wherein the adenovirus is a wild type adenovirus.

43. (New) The method of claim 41, wherein the adenovirus is a selectively replicating adenovirus.

44. (New) The method of claim 34, wherein the adenovirus is replication deficient.

45. (New) The method of claim 44, wherein the genome of the adenovirus comprises a partial or total deletion of the adenoviral E1 region.

46. (New) The method of claim 44, wherein the genome of the adenovirus comprises a partial or total deletion of the protein IX-encoding region.

47. (New) The method of claim 34, wherein the adenoviral coat protein is selected from a fiber, a penton and a hexon.

48. (New) The method of claim 34, wherein the targeting ligand is an antibody.

49. (New) The method of claim 48, wherein the antibody is reactive with a tumor antigen.

50. (New) The method of claim 48, wherein the antibody is selected from the group consisting of Fab, Fab', Fab2', and Fv fragments.

51. (New) The method of claim 48, wherein the antibody is a human antibody.

52. (New) The method of claim 48, wherein the antibody is a single chain antibody.

53. (New) The method of claim 52, wherein the single chain antibody is reactive to carcinoembryonic antigen.

54. (New) The method of claim 34, wherein the targeting ligand comprises a conformationally constrained peptide.

55. (New) The method of claim 54, wherein the conformationally constrained peptide comprises a portion of an adenoviral fiber protein.